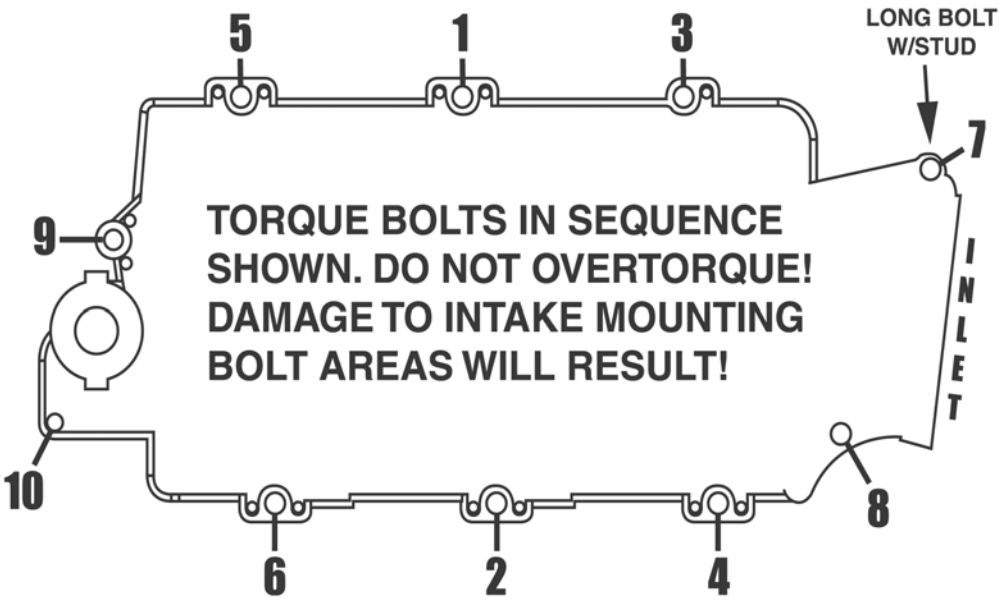
IMPORTANT

Refer to the appropriate shop manual for your vehicle to obtain specific service procedures for this part. If you do not have a service manual or lack the skill to install this part, it is recommended that you seek the services of a qualified technician. Pay special attention to all cautions and warnings included in the shop manual! Read and follow all instructions carefully! Failure to do so will result in severe damage to the intake manifold and to the engine!

- **DO NOT USE AIR TOOLS** when installing this manifold! Damage (crushing) to the manifold bolt areas will occur**.**
- **IMPORTANT! It will be necessary to replace the original EGR tube located in the lower intake manifold. Remove the original tube by using a twisting action. Match the appropriate sized replacement tube (3/4 or 5/8) in the kit to the original. Gently tap the correct replacement tube into place in the lower intake manifold. If the EGR tube is not in place on the lower intake manifold, or not installed properly, extremely hot exhaust gases from the port will melt the manifold and the engine will flood with coolant. Severe engine damage will result! NOTE: BE SURE THE REPLACEMENT TUBE IS AT THE SAME HEIGHT AS THE ORIGINAL OR DAMAGE TO THE UPPER INTAKE WILL OCCUR! See reverse side**
- Torque all bolts in sequence shown below.
- Begin by **HAND TIGHTENING** the retaining bolts. **DO NOT USE AIR TOOLS ON THE BOLTS! IMPORTANT! ALL BOLTS ARE TO BE TORQUED TO INCH POUNDS! DO NOT TORQUE BOLTS TO FOOT POUNDS!**
- Torque manifold in three passes.
- First pass - torque all bolts in sequence shown to **22 INCH** pounds.
- Second pass - torque all bolts in sequence shown to **44 INCH** pounds.
- Third pass - torque all bolts in sequence shown to **89 INCH** pounds.

IMPORTANT!

- **Be sure to install ALL PCV components (new PCV valve, spring, upper and lower O rings) into the replacement unit.**
- **Install the new injector O-rings provided**
- **Install the provided O-rings on the PCV valve and the vacuum fitting. DO NOT OMIT!**
- **Failure to transfer these components will result in whistling at idle, oil in the manifold, a high idle, rough running and vacuum in the crankcase**



This kit contains several parts such as injector O-rings (6 upper and 6 lower), PCV valve O-ring, PCV valve spring, vacuum fitting O-ring, and upgraded coolant passage seals.

New injector upper and lower O-rings are also included in the kit. According to the warning found in the shop manual, new injector O-rings should always be replaced when fuel injectors have been removed or serviced. This will prevent drivability concerns created when the worn, damaged or defective injector O-rings are reused.

Locate the black O-rings (2) in the package and install them on the PCV valve (under the lip) and the vacuum fitting groove. Refer to the shop manual for installation procedures.

Pictured below is a properly installed EGR tube (end gasket is omitted for clarity). This should be the position of the replacement tube after the upper intake manifold has been installed.

Replacement EGR tube properly installed

See your GM shop manual for specific installation procedures pertaining to these parts.[i]

Revised 8/07